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# FEE TRANSMITTAL for FY 2003

*Patent fees are subject to annual revision.*

Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT** (\$ 180.00)

## Complete if Known

Application Number	09/466568
Filing Date	December 17, 1999
First Named Inventor	Gerald R. Crabtree
Examiner Name	B. Loeb
Group Art Unit	1636
Attorney Docket No.	APBI-P16-316

## METHOD OF PAYMENT (check all that apply)

Check  Credit Card  Money Order  Other  None

Deposit Account

Deposit Account Number **18-1945**

Deposit Account Name **Ropes & Gray**

The Commissioner is hereby authorized to: (check all that apply)

- Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) during the pendency of this application  
 Charge fee(s) indicated below, except for the filing fee

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## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

#### Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	180.00
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

SUBTOTAL (1) (\$ 0.00)

Total Claims	** =	Extra Claims	Fee from below	Fee Paid
Independent Claims	=			
Multiple Dependent	=			

Large Entity	Small Entity	Fee Description
Fee Code	Fee Code (\$)	
1202	18	2202 9 Claims in excess of 20
1201	84	2201 42 Independent claims in excess of 3
1203	280	2203 140 Multiple dependent claim, if not paid
1204	84	2204 42 ** Reissue independent claims over original patent
1205	18	2205 9 ** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 0.00)

\*\*or number previously paid, if greater; For Reissues, see above

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 180.00)

SUBMITTED BY		Complete (if applicable)	
Name (Print/Type)	Matthew P. Vining	Registration No. (Attorney/Agent)	36,709
Signature	<i>Matthew P. Vining</i>	Telephone	(617) 951-7739

Date

*3/25/03*



I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Commissioner for Patents, Washington, DC 20231, on the date shown below.

Dated: 3/26/03 Signature: Ann P. Lucey  
(Anna P. Lucey)

Docket No.: APBI-P16-316  
(PATENT) #3D

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Crabtree et al.

Application No.: 09/466568

Group Art Unit: 1636

Filed: December 17, 1999

Examiner: B. Loeb

For: **REGULATED TRANSCRIPTION OF  
TARGETED GENES AND OTHER  
BIOLOGICAL EVENTS**

TECH CENTER 1600/2900

APR 07 2003

**RECEIVED**

Commissioner for Patents  
Washington, DC 20231

Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Rejection or Notice of Allowance.

A copy of each reference on PTO/SB/08 is attached.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR 1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

04/04/2003 MBLANCO 00000015 181945 09466568

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180.00 CH

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents should one or more of the documents be applied against the claims of the present application.

Please charge our Deposit Account No. 18-1945 in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p). The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 18-1945, under Order No. APBI-P16-316.

Dated:

Respectfully submitted,

By

Matthew P. Vincent

Registration No.: 36,709

ROPES & GRAY

One International Place

Boston, Massachusetts 02110-2624

(617) 951-7000

(617) 951-7050 (Fax)

Attorneys/Agents For Applicant

Form PTO/SB/08 <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> <i>(Use several sheets if necessary)</i>			Docket Number (Optional) <b>APBI-P16-316</b>		Application Number <b>09/466,568</b>		
			Applicant <b>Crabtree et al.</b>				
			Filing Date <b>December 17, 1999</b>	Group Art Unit <b>1636</b>			
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
OP	AA 5,171,671	12/15/92	Evans et al.	<b>RECEIVED</b>			
MAR 31 2003				APR 07 2003			
<b>TECH CENTER 1600/2900</b>							
<b>FOREIGN PATENT DOCUMENTS</b>							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
	AB EP 594847	5/4/94	Europe				
	AC WO 93/25533	12/23/93	PCT				
	AD WO 93/23550	11/25/93	PCT				
<b>OTHER DOCUMENTS</b> <i>(Including Author, Title, Date, Pertinent Pages Etc.)</i>							
AE	Alberg, D.G and Schreiber, S.L. Structure-Based Design of a Cyclophilin-Calcineurin Bridging Ligand. <i>Science</i> 262, 248-250 (1993).						
AF	Albers, M.W. et al. FKBP, Thought to be Identical to PKCI-2, Does Not Inhibit Protein Kinase C. <i>BioMed. Chem. Lett.</i> 1, 205-210 (1991).						
AG	Albers, M.W. et al. An FKBP-Rapamycin Sensitive, Cyclin-Dependent Kinase Activity That Correlates with the FKBP Rapamycin-Induced G1 Arrest Point in MG-63 Cells. <i>Annals of N. Y. Acad. Sci.</i> 696, 54-62 (1993).						
AH	Albers, M.W. et al. Relationship of FKBP to PKCI-1. <i>Nature</i> 351, 527 (1991).						
AI	Albers, M.W. et al. Substrate Specificity for the Human Rotamase FKBP: A View of FK506 and Rapamycin as Leucine (twisted amide)-Proline Mimics. <i>J. Org. Chem.</i> 55, 4984-4986 (1990).						
AJ	Andrus, M.B. and Schreiber, S.L. Structure-Based Design of an Acyclic Ligand That Bridges FKBP12 and Calcineurin. <i>J. Am. Chem. Soc.</i> 115, 10420-10421 (1993).						
AK	Ben-Levy, R. et al. A oncogenic point mutation confers High Affinity Ligand Binding to the neu Receptor. <i>J. Biol. Chem.</i> 267, 17304-17313 (1992).						
AL	Bergsma, D.J. et al. The Cyclophilin Multigene Family of Peptidyl-Prolyl Isomerases. <i>J. Biol. Chem.</i> 266, 23204-23214 (1991).						
AM	Bernard, O. et al. High-affinity Interleukin-2 Binding by an Oncogenic Hybrid Interleukin-2 Epidermal Growth Factor Receptor Molecule. <i>PNAS</i> 84, 2125-2129 (1987).						
AN	Bierer, B.E. et al. The Effect of the Immunosuppressant FK506 on Alternate Pathways of T Cell Activation. <i>Eur. J. Immunol.</i> 21, 439-445 (1991).						
AO	Bierer, B.E. et al. Mechanisms of Immunosuppression by FK506: Preservation of T Cell Transmembrane Signal Transduction. <i>Transplantation</i> 49, 1168-1202 (1990).						

Form PTO/SB/08 <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> <i>(Use several sheets if necessary)</i>		Docket Number (Optional) <b>APBI-P16-316</b>	Application Number <b>09/466,568</b>
		Applicant Crabtree et al.	
		Filing Date December 17, 1999	Group Art Unit 1636
AP	Bierer, B.E. et al. Probing Immunosuppressant Action with a Nonnatural Immunosuppressive Ligand. <i>Science</i> 250, 556-559 (26 Oct. 1990).		
AQ	Bierer, B.E. et al. Two Distinct Signal Transmission Pathways in T Lymphocytes are Inhibited by Complexes Formed Between an Immunophilin and Either FK506 or Rapamycin. <i>PNAS</i> 87, 9231-9235 (Dec. 1990).		
AR	Bonnerot, C. et al. Role of associated $\gamma$ -chain in Tyrosine Kinase Activation via Murine FcRIII. <i>EMBO J.</i> 11, 2747-2757 (1992).		
AS	Bram, R.J. et al. Identification of the Immunophilins Capable of Mediating Inhibition of Signal Transduction by Cyclosporin A and FK506: Roles of Calcineurin Binding and Cellular Location. <i>Mol. Cell. Biol.</i> 13, 4760-4769 (Aug. 1993).		
AT	Byrn, R.A. et al. Biological Properties of a CD4 Immunoadhesin. <i>Nature</i> 344, 667-670 (12 April 1990).		
AU	Cantley, L.C. et al. Oncogenes and signal transduction. <i>Cell</i> 64, 281-302 (25 Jan. 1991).		
AV	Chan, A.C. et al. The $\zeta$ Chain is associated with a Tyrosine Kinase and upon T-Cell Antigen Receptor Stimulation Associates with ZAP-70, a 70-kDa Tyrosine Phosphoprotein. <i>PNAS</i> 88, 9166-9170 (Oct. 1991).		
AW	Chung, J. et al. Rapamycin-FKBP specifically blocks growth-dependent activation of and signaling by the 70 kd S6 protein kinases. <i>Cell</i> 69, 1227-1236 (26 June 1992).		
AX	Clark, M.R. et al. The B Cell Antigen Receptor Complex: Association of Ig- $\alpha$ and Ig- $\beta$ with Distinct Cytoplasmic Effectors. <i>Science</i> 258, 123-126 (2 Oct. 1992).		
AY	Clipstone, N.A. et al. Calcineurin: Molecular analysis of its interaction with drug-immunophilin complexes and its role in the regulation of NF-AT. <i>J. Cell. Biochem. Suppl.</i> 0 (18B) 274, Abstract #I410 (1994).		
AZ	Crabtree, G. R. IL-2 receptor in the pathogenesis of human lymphoma. Abstract of NIH Grant 5R01CA039612-03 (1987).		
BA	Crabtree, G. R. Pathways of T lymphocyte activation. Abstract of NIH Grant 2R01CA039612-07 (1991).		
BB	DiLella, A.G. et al. Chromosomal Band Assignments of the Genes Encoding Human FKBP12 and FKBP13. <i>Biochem. Biophys. Res. Commun.</i> 189, 819-823 (15 Dec. 1992).		
BC	Donald, D.K. et al. C10 N-Acyl Modified FK-506: A Possible Hybrid Analogue of the Transition State of Peptidyl-Prolyl Cis-Trans Isomerization. <i>Tetrahedron Letters</i> 31, 1375-1378 (1991).		
BD	Durand, D.B et al. Characterization of Antigen Receptor Response Elements within the Interleukin-2 Enhancer. <i>Mol. Cell. Biol.</i> 8, 1715-1724 (April 1988).		
BE	Eberle, M.K. and Nuninger, F. Synthesis of the Main Metabolite (OL-17) of Cyclosporin A. <i>J. Org. Chem.</i> 57, 2689-2691 (1992).		
BF	Edalji, R. et al. High-Level Expression of Recombinant Human FK-Binding Protein from a Fusion Precursor. <i>J. Prot. Chem.</i> 11, 213-223 (1992).		

<b>Form PTO/SB/08 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)</b>		Docket Number (Optional) APBI-P16-316	Application Number 09/466,568
		Applicant Crabtree et al.	
		Filing Date December 17, 1999	Group Art Unit 1636
BG	Eiseman, E. and Bolen, J.B. Signal Transduction by the Cytoplasmic Domains of Fc $\epsilon$ RI- $\gamma$ and TCR $\alpha$ J- $\gamma$ in Rat Basophilic Leukemia Cells. <i>J. Biol. Chem.</i> 267, 21027-21032 (15 Oct. 1992).		
BH	Emmel, E.A. et al. Cyclosporin A Specifically Inhibits Function of Nuclear Proteins Involved in T-Cell Activation. <i>Science</i> 246, 1617-1620 (22 Dec. 1989).		
BI	Engel, I. et al. High-Efficiency Expression and Solubilization of Functional T-Cell antigen Receptor Heterodimers. <i>Science</i> 256, 1318-1321 (29 May 1992).		
BJ	Evans, D.A. et al. Mechanistic Study of the Rhodium(I)- and Iridium(I)- Catalyzed Hydroboration Reactions: Scope and Synthetic Applications. <i>J. Am. Chem. Soc.</i> 114, 6671-6679 (1992).		
BK	Fields, S. & Song, O-k.. A Novel Genetic System to Detect Protein-Protein Interactions. <i>Nature</i> 340, 245-246 (20 July 1989).		
BL	Fischer, G. et al. Mip protein of Legionella pneumophila exhibits peptidyl-prolyl-cis/trans isomerase (Pphase) activity. <i>Mol. Microbiol.</i> 6, 1375-1383 (1992).		
BM	Fisher, M.J. et al. On the Remarkable Propensity for Carbon-Carbon Bond Cleavage Reactions in the C8-C10 Region of FK-506. <i>J. Org. Chem.</i> 56, 2900-2907 (1991).		
BN	Flanagan, W.M. et al. Intracellular signal transmission: a novel role for the prolyl isomerases. <i>J. Cell. Biochem. Suppl.</i> 0 (16 Part A) 61, Abstract #B005 (1992).		
BO	Flanagan, W.M. et al. Nuclear Association of a T-Cell Transcription Factor Blocked by a Tyrosine Factor Blocked by FK-506 and Cyclosporin A. <i>Nature</i> 352, 803-807 (29 Aug. 1991).		
BP	Flanagan, W.M. et al. Nuclear association of a transcription factor essential for T cell activation by cyclosporin A and FK506. <i>J. Cell. Biochem. Suppl.</i> 0 (16 Part B), 237, Abstract #H514 (1992).		
BQ	Francavilla, A. et al. Inhibition of Liver, Kidney, and Intestine Regeneration by Rapamycin. <i>Transplantation</i> 53, 496-498 (1992).		
BR	Fretz, H. et al. Rapamycin and FK506 Binding Proteins (Immunophilins). <i>J. Am. Chem. Soc.</i> 113, 1409-1411 (1991).		
BS	Friedman, J. & Weissman, I. Two Cytoplasmic Candidates for Immunophilin Action are Revealed by Affinity for a New Cyclophilin: One in the Presence and One in the Presence and One in the Absence of CsA. <i>Cell</i> 66, 799-806 (23 Aug. 1991).		
BT	Fuh, G. et al. Rational design of potent antagonists to the human growth hormone receptor. <i>Science</i> 256, 1677-1680 (19 June 1992).		
BU	Galat, A. et al. A Rapamycin-Selective 25 kDa Immunophilin. <i>Biochemistry</i> 31, 2427-2434 (1992).		
BV	Ghosh, A.K. et al. N,N'-Disuccinimidyl Carbonate: A Useful Reagent for Alkoxy carbonylation of Amines. <i>Tetrahedron Letters</i> 33, 2781-2784 (1992).		
BW	Gottschalk, W.K. et al. The Carboxy Terminal 100 Amino Acid Portion of the Insulin Receptor is Important for Insulin Signaling to Pyruvate Dehydrogenase. <i>Biochem. Biophys. Res. Comm.</i> 189, 906-911 (15 Dec. 1992).		

Form PTO/SB/08 <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> <i>(Use several sheets if necessary)</i>		Docket Number (Optional) APBI-P16-316	Application Number 09/466,568
		Applicant Crabtree et al.	
		Filing Date December 17, 1999	Group Art Unit 1636
BX	Haendler, B. et al. Complementary DNA for human T-cell cyclophilin. <i>EMBO J.</i> 6, 947-950 (1987).		
BY	Haendler, B. et al. Yeast cyclophilin: isolation and characterization of the protein, cDNA and gene. <i>Gene</i> 83, 39-46 (1989).		
BZ	Harding, M.W. et al. A Receptor for the Immunosuppressant FK506 is a cis-trans Peptidyl-Prolyl Isomerase. <i>Nature</i> 341, 758-760 (1989).		
CA	Herbst, R. et al. Substrate Phosphorylation Specificity of the Human c-kit Receptor Tyrosine Kinase. <i>J. Biol. Chem.</i> 266, 19908-19916 (1991).		
CB	Howard, F.D. et al. The CD3 $\zeta$ Cytoplasmic Domain Mediates CD2-Induced T Cell Activation. <i>J. Exp. Med.</i> 176, 139-145 (1992).		
CC	Hultsch, T. et al. Immunophilin Ligands Demonstrate Common Features of Signal Transduction Leading to Exocytosis or Transcription. <i>PNAS</i> 88, 6229-6233 (July 1991).		
CD	Hultsch, T. et al. Inhibition of IgE Receptor-Mediated Exocytosis from Rat Basophilic Leukemia Cells by FK506 is Reversed by Rapamycin: Evidence for Common Signaling Pathways in Mast Cells and T Lymphocytes. <i>FASEB J.</i> 5, A1008 [3705] (1991).		
CE	Hung, D.T. & Schreiber, S.L. CDNA Cloning of a Human 25 kDa FK506 and Rapamycin Binding Protein. <i>Biochem. Biophys. Res. Comm.</i> 184, 733 (30 April 1992).		
CF	Ikeda, Y. et al. Structural Basis for Peptidomimicry by a Natural Product. <i>J. Am. Chem. Soc.</i> 116, 4143-4144 (1994).		
CG	Irving, B.A. & Weiss, A. The Cytoplasmic Domain of the T Cell Receptor $\zeta$ Chain is Sufficient to Couple to Receptor-Associated Signal Transduction Pathways. <i>Cell</i> 64, 891-901 (8 March 1991).		
CH	Itoh, N. & Nagata, S. A Novel Protein Domain Required for Apoptosis. <i>J. B. C.</i> 268, 10932-10937 (25 May 1993).		
CI	Itoh, N. et al. Effect of bcl-2 on Fas Antigen Mediated Cell Death. <i>J. Immunol.</i> 151, 621-627 (1993).		
CJ	Jin, Y.-J. et al. Molecular cloning of a membrane-associated human FK506- and rapamycin-binding protein, FKBP-13. <i>PNAS</i> 88, 6677-6681 (Aug. 1991).		
CK	Jones, A.B. et al. Studies Relating to the Synthesis of the Immunosuppressive Agent FK506: Coupling of Fragments via a Stereoselective Trisubstituted Olefin Forming Reaction Sequence. <i>J. Org. Chem.</i> 54, 17-19 (1989).		
CL	Kao, P.N. et al. Nuclear target of cyclosporin A and FK506 action is specifically bound by a heterodimeric protein comprising molecular weights 90K and 45K. <i>J. Cell. Biochem. Suppl.</i> 0 (16 Part B), 239, Abstract #H523 (1992).		
CM	Kaye, R.E. et al. Effects of Cyclosporin A and FK506 on Fce Receptor type I-Initiated Increases in Cytokine mRNA in Mouse Bone Marrow-Derived Progenitor Mast Cells: Resistance to FK506 is Associated with a Deficiency in FKBP12. <i>PNAS</i> 89, 8542-8546 (Sept. 1992).		
CN	Ke, H. et al. Crystal Structures of Cyclophilin A Complexed with Cyclosporin A and N-methyl-4-[ <i>E</i> -2-Butenyl]-4,4-Dimethyltheonine Cyclosporin A. <i>Structure</i> 2, 33-44 (15 Jan. 1994).		

Form PTO/SB/08 <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> <i>(Use several sheets if necessary)</i>		Docket Number (Optional) APBI-P16-316	Application Number 09/466,568
		Applicant Crabtree et al.	
		Filing Date December 17, 1999	Group Art Unit 1636
	CO	Kinet, J.-P. Antibody-Cell Interactions: Fc Receptors. <i>Cell</i> 57, 351-354 (5 May 1989).	
	CP	Krishnamurthy, S. Lithium Tris[(3-ethyl-3-pentyl)oxy]aluminum Hydride. A New Remarkably Chemoselective Reagent for the Reduction of Aldehydes in the Presence of Ketones. <i>J. Org. Chem.</i> 46, 4628-4629 (1981).	
	CQ	Kruskal, B.A. et al. Phagocytic Chimeric Receptors Require Both Transmembrane and Cytoplasmic Domains from the Mannos Receptor. <i>J. Exp. Med.</i> 176, 1673-1680 (1992).	
	CR	Lammers et al. Differential Signaling Potential in Insulin- and IGF-1-receptor Cytoplasmic Domains. <i>EMBO J.</i> 8, 1369-1375 (1989).	
	CS	Lane et al. Complete Amino Acid Sequence of the FK506 and Rapamycin Binding Protein, FKBP, Isolated from Calf Thymus. <i>J. Prot. Chem.</i> 10, 151-160 (1991).	
	CT	Lanier et al. Co-association of CD3 $\zeta$ with a Receptor (CD16) for IgG Fc on Human Natural Killer Cells. <i>Nature</i> 342, 803-805 (1989).	
	CU	Larson & Nuss. Cyclophilin-dependent stimulation of transcription by cyclosporin A. <i>PNAS</i> 90, 148 (1993).	
	CV	Lee, A. W.-m. and Neinhuis, A.W. Functional Dissection of Structural Domains in the Receptor for Colony Stimulating Factor-1. <i>J. Biol. Chem.</i> 267, 16472-16483 (1992).	
	CW	Lee, J. et al. HER2 Cytoplasmic Domain Generates Normal Mitogenic and Transforming Signals in a Chimeric Receptor. <i>EMBO J.</i> 8, 167-173 (1989).	
	CX	Lehtola et al. A chimeric EGFR/neu receptor in functional analysis of the neu oncogene. <i>Acta Oncologia</i> 31, 147-150 (1992).	
	CY	Lehtola et al. Receptor Downregulation and DNA Synthesis are Modulated by EGF and TPA in Cells Expressing an EGF/neu Chimera. <i>Growth Factors</i> 1, 323-334 (1989).	
	CZ	Lehvaslaiho et al. A Chimeric EGF-R-neu Proto-Oncogene Allows EGF to Regulate neu Tyrosine Kinase and Cell Transformation. <i>EMBO J.</i> 8, 159-166 (1989).	
	DA	Lehvaslaiho, H. et al. Regulation by EGF is maintained in an overexpressed chimeric EDG/neu receptor tyrosine kinase. <i>J. Cell. Biochem.</i> 42, 123-133 (1990).	
	DB	Letourner & Klausner. Activation of T Cells by a Tyrosine Kinase Activation Domain in the Cytoplasmic Tail of CD3 $\epsilon$ . <i>Science</i> 258, 123-126 (1992).	
	DC	Lev et al. Receptor functions and ligand-dependent transforming potential of a chimeric kit proto-oncogene. <i>Mol. Cell. Biol.</i> 10, 6064-6068 (1990).	
	DD	Lev et al. A Specific Combination of Substrates is Involved in Signal Transduction by the kit-Encoded Receptor. <i>EMBO J.</i> 10, 647-654 (1991).	
	DE	Liu. FK506 and cyclosporin, molecular probes for studying intracellular signal transduction. <i>Immunology Today</i> 14, 290 (1993).	

Form PTO/SB/08 <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> <i>(Use several sheets if necessary)</i>			Docket Number (Optional) APBI-P16-316	Application Number 09/466,568
			Applicant Crabtree et al.	
			Filing Date December 17, 1999	Group Art Unit 1636
	DF	Liu et al. Calcineurin is a Common Target of Cyclophilin-Cyclosporin A and FKBP-FK506 Complexes. <i>Cell</i> 66, 807 (1991).		
	DG	Liu et al. Cloning, expression, and purification of human cyclophilin in Escherichia coli and assessment of the catalytic role of cysteines by site-directed mutagenesis. <i>PNAS</i> 87, 2304 (1990).		
	DH	Liu et al. Inhibition of T Cell Signaling by Immunophilin-Ligand Complexes Correlates With Loss of Calcineurin Phosphatase Activity. <i>Biochemistry</i> 31, 3896-3901 (1992).		
	DI	Maki, N. et al. Complementary DNA encoding the human T-cell FK506-binding protein, a peptidylprolyl cis-trans isomerase distinct from cyclophilin. <i>PNAS</i> 87, 5440-5443 (July 1990).		
	DJ	Mares et al. A Chimera between Platelet-Derived Growth Factor B-receptor and Fibroblast Growth Factor Receptor-1 Stimulates Pancreatic $\beta$ -DNA Synthesis in the Presence of PDGF-BB. <i>Growth Factors</i> 6, 93-101 (1992).		
	DK	Margolis et al. All Autophosphorylation Sites of Epidermal Growth Factor (EGF) Receptor and HER2/neu are Located in their Carboxyl-Terminals Tails. <i>J. Biol. Chem.</i> 264, 10667-10671 (1989).		
	DL	Mattila et al. The Actions of Cyclosporin A and FK506 Suggest A Novel Step in the Activation of T Lymphocytes. <i>EMBO J.</i> 9, 4425-4433 (1990).		
	DM	Meyer et al. Synthetic Investigations of Rapamycin. 1. Synthesis of a C10-C21 Fragment. <i>J. Org. Chem.</i> 57, 5058-5060 (1992).		
	DN	Michnick et al. Solution Structure of FKBP, a Rotamase Enzyme and Receptor for FK506 and Rapamycin. <i>Science</i> 252, 836-839 (1991).		
	DO	Moe et al. Transmembrane Signaling by a Chimera of the Escherichia coli Aspartate Receptor and the Human Insulin Receptor. <i>PNAS</i> 86, 5683-5687 (1989).		
	DP	Nakatsuka et al. Total Syntheses of FK506 and an FKBP Probe Reagent, (C8, C9-13C2)-FK506. <i>J. Am. Chem. Soc.</i> 112, 5583 (1990).		
	DQ	Nussbaumer et al. C9-Imino and C10-Amino Derivatives of Ascomycin (21-Ethyl-FK506). <i>Tetrahedron Letters</i> 33, 3845-3846 (1992).		
	DR	Orloff et al. Family of Disulphide-Linked Dimers Containing the $\zeta$ and $\eta$ Chains of the T-Cell Receptor and the $\gamma$ Chain of the Fc Receptors. <i>Nature</i> 347, 189-191 (1990).		
	DS	Palmeter et al. Transgenic Mice. <i>Cell</i> 41, 343-345 (1985).		
	DT	Patchett et al. Analogs of Cyclosporin A Modified at the D-ALA <sup>8</sup> Position. <i>J. Antibiotics</i> 45, 94-102 (1992).		
	DU	Peles et al. Regulated Coupling of the Neu Receptor to Phosphatidylinositol. <i>J. Biol. Chem.</i> 267, 12266-12274 (1992).		
	DV	Price et al. Human cyclophilin B: A second cyclophilin gene encodes a peptidyl-prolyl isomerase with a signal sequence. <i>PNAS</i> 88, 1903 (1991).		

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DW	Ptashne et al. Activators and Targets. <i>Nature</i> 346, 329-331 (1990).		
DX	Ragan et al. Studies of the Immunosuppressive Agent FK506: Synthesis of an Advanced Intermediate. <i>J. Org. Chem.</i> 54, 4267-4268 (1989).		
DY	Reins et al. Anti-epidermal growth factor receptor monoclonal antibodies affecting signal transduction. <i>J. Cell. Biol.</i> 51, 236-248 (1993).		
DZ	Riedel et al. Cytoplasmic Domains Determine Signal Specificity, Cellular Routing Characteristics and Influence Ligand Binding of Epidermal Growth Factor and Insulin Receptors. <i>EMBO J.</i> 8, 2943-2954 (1989).		
EA	Romeo et al. Cellular immunity to HIV activated by CD4 fused to T cell or Fc receptor polypeptides. <i>Cell</i> 64, 1037-1046 (1991).		
EB	Romo et al. Synthetic Investigations of Rapamycin. 2. Synthesis of a C22-C42 Fragment. <i>J. Org. Chem.</i> 57, 5060-5063 (1992).		
EC	Romo et al. Total Synthesis of Rapamycin Using an Evans-Tischenko Fragment Coupling. <i>J. Am. Chem. Soc.</i> 115, 7906-7907 (1993).		
ED	Rosen et al. Activation of an Inactive Immunophilin by Mutagenesis. <i>J. Am. Chem. Soc.</i> 115, 821-822 (1993).		
EE	Rosen et al. Inhibition of FKBP Rotamase Activity by Immunosuppressant FK506: A Twisted Amide Surrogate. <i>Science</i> 248, 863 (1990).		
EF	Rosen et al. Natural Products as Probes of Cellular Function: Studies of Immunophilins. <i>Angew. Chemie. Int. Ed. Eng.</i> 31, 384-400 (1992).		
EG	Rosen et al. Proton and Nitrogen Sequential Assignments and Secondary Structure Determination of the Human FK506 and Rapamycin Binding Protein. <i>Biochemistry</i> 30, 4774-4789 (1991).		
EH	Rosen et al. Study of Receptor-Ligand Interactions Through Receptor Labeling and Isotope-Edited NMR. <i>J. Org. Chem.</i> 56, 6262 (1991).		
EI	Roussel et al. Antibody-Induced Mitogenicity Mediated by a Chimeric CD2-c-fms Receptor. <i>Mol. Cell. Biol.</i> 10, 2407-2412 (1990).		
EJ	Rudert et al. Apoptosis in L929 cells expressing a CD40/Fas chimeric receptor: Dissociation of stimulatory from inhibitory death signaling functions. <i>Biochem. Biophys. Res. Comm.</i> 204, 1102 (1994).		
EK	Sampson & Gotschlich. <i>Neisseria meningitidis</i> encodes an FK506-inhibitable rotamase. <i>PNAS</i> 89, 1164 (1992).		
EL	Schreiber, S. L. Analysis of cyclosporin-receptor interaction: Synthesis of semi-peptide and non-peptide analogs of cyclosporin A. <i>Abstract of NIH Grant P01GM406600001</i> (1989).		
EM	Schreiber, S. L. Chemistry and Biology of the Immunophilins and their Immunosuppressive Ligands. <i>Science</i> 251, 283 (1991).		

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EN	Schreiber, S. L. Immunophilin-Sensitive Phosphatase Action in Cell Signaling Pathways. <i>Cell</i> 70, 365-369-8 (1992).		
EO	Schreiber et al. Immunophilin-Ligand Complexes as Probes of Intracellular Signaling Pathways. <i>Transplantation Proceedings</i> 23, 2839 (1991).		
EP	Schreiber, S. L. Synthesis of materials with physiological properties. Abstract of NIH Grant R37GM38627, (1992).		
EQ	Schreiber, S. L. Synthesis of materials with physiological properties. Abstract of NIH Grant R37GM38627, (1987).		
ER	Schreiber et al. Is There a Scaffolding Domain within the Structure of the Immunosuppressive Agent Cyclosporin A (CsA)? Studies of the Cyclophilin Binding Domain of CsA. <i>Tetrahedron Lett.</i> 29, 6577 (1988).		
ES	Schreiber et al. The Mechanism of Action of Cyclosporin A and FK506. <i>Immunology Today</i> 13, 136-142 (1992).		
ET	Schreiber et al. Molecular Recognition of Immunophilins and Immunophilin-Ligand Complexes. <i>Tetrahedron</i> 48, 2545-2558 (1992).		
EU	Schreiber et al. Studies Relating to the Synthesis of the Immunosuppressive Agent FK506: Application of the Two Directional Chain Synthesis Strategy to the Pyranose Moiety. <i>J. Org. Chem.</i> 54, 9, 15 (1989).		
EV	Schultz et al. Atomic Structure of the Immunophilin FKBP13-FK506 Complex: Insights Into the Composite Binding Surface for Calcineurin. <i>J. Am. Chem. Soc.</i> 116, 3129-3130 (1994).		
EW	Seedorf et al. Analysis of platelet-derived growth factor receptor domain function using a novel chimeric receptor approach. <i>J. Biol. Chem.</i> 266, 12424-12431 (1991).		
EX	Seedorf et al. Differential effects of carboxy-terminal sequence deletions on platelet-derived growth factor receptor signaling activities and interactions with cellular substrates. <i>Mol. Cell. Biol.</i> 12, 4347-4356 (1992).		
EY	Selvakumaran et al. Myeloblastic leukemia cells conditionally blocked Myc-estrogen receptor chimeric transgenes for terminal differentiation coupled to growth arrest and apoptosis. <i>Blood</i> 81, 2257 (1993).		
EZ	Serafini et al. Selection and characterization of mutants in a signal transduction/transmission pathway. <i>J. Cell. Biochem. Suppl.</i> 0 (6 Part A), 89, Abstract #B234 (1992).		
FA	Shaw et al. Identification of a Putative Regulator of Early T Cell Activation Genes. <i>Science</i> 241, 202 (1988).		
FB	Sistonen et al. Activation of the neu Tyrosine Kinase Induces the fos/jun Transcription Factor Complex, the Glucose Transporter, and Ornithine Decarboxylase. <i>J. Cell. Biol.</i> 109, 1911-1919 (1989).		
FC	Smith et al. FKBP54, a Novel FK506 Binding Protein in Avian Progesterone Receptor Complexes and HeLa Extracts. <i>J. Biol. Chem.</i> 268, 24270-24273 (1993).		
FD	Somers et al. Synthesis and Analysis of 506BD, a High Affinity Ligand to the Immunophilin, FKBP. <i>J. Am. Chem. Soc.</i> 113, 8045-8056 (1991).		

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FE	Standaert et al. Molecular cloning and overexpression of the human FK506-binding protein FKBP. <i>Nature</i> 346, 671 (1990).		
FF	Tai et al. Association of a 59-Kilodalton Immunophilin with the Glucocorticoid Receptor Complex. <i>Science</i> 256, 1315-1318 (1992).		
FG	Tai et al. P59 (FK506 Binding Protein 59) Interaction with Heat Shock Proteins is Highly Conserved and May Involve Proteins Other Than Steroid Receptors. <i>Biochemistry</i> 32, 8842-8847 (1993).		
FH	Tanida et al. Yeast Cyclophilin-related gene encodes a nonessential second peptidyl-prolyl cis-trans isomerase with the secretory pathway. <i>Transplantation Proceedings</i> 23, 2856 (1991).		
FI	Traber et al. Cyclosporins – New Analogues by Precursor Directed Biosynthesis. <i>J. Antibiotics</i> 42, 591-597 (1989).		
FJ	Ullman et al. Site of action of cyclosporin and FK506 in the pathways of communication between the T-lymphocyte antigen receptor and the early activation genes. <i>Transplant. Proceed.</i> 23, 2845 (1991).		
FK	Van Duyne et al. Atomic Structure of FKBP-FK506, an Immunophilin-Immunosuppressant Complex. <i>Science</i> 252, 839-842 (1991).		
FL	Van Duyne et al. Atomic Structure of the Rapamycin human immunophilin FKBP-12 complex. <i>J. Am. Chem. Soc.</i> 113, 7433 (1991).		
FM	Van Duyne et al. Atomic Structures of the Human Immunophilin FKBP12 Complexes with FK506- and Rapamycin. <i>J. Mol. Biol.</i> 229, 105-124 (1993).		
FN	VanRheenen et al. An Improved Catalytic OsO <sub>4</sub> Oxidation of the Olefins to Cis-1,2 Glycols Using Tertiary Amine Oxides as the Oxidant. <i>Tetrahedron Letters</i> 23, 1973-1976 (1976).		
FO	Venkitaraman et al. Interleukin 7 receptor functions by recruiting the tyrosine kinase p59 <sup>lym</sup> through a segment of its cytoplasmic tail. <i>PNAS</i> 89, 12083-12087 (1992).		
FP	Verweij et al. Cell Type Specificity and Activation Requirements for NFAT-1 (Nuclear Factor of Activated T-Cells) Transcriptional Activity Determined by a New Method Using Transgenic Mice to Assay Transcriptional Activity of an Individual Nuclear Factor. <i>J. Biol. Chem.</i> 265, 15788 (1990).		
FQ	Walsh et al. Cyclosporin A, the Cyclophilin Class of Peptidylprolyl Isomerases, and Blockade of T Cell Signal Transduction. <i>J. Biol. Chem.</i> 267, 13115 (1992).		
FR	Wandless et al. FK506 and Rapamycin Binding to FKBP: Common Elements Involved in Immunophilin-Ligand Complexation. <i>J. Am. Chem. Soc.</i> 113, 2339-2341 (1991).		
FS	Watanabe-Fukunga et al. Lymphoproliferation Disorder in Mice Explained by Defects in Fas Antigen that Mediates Apoptosis. <i>Nature</i> 356, 314-317 (1992).		
FT	Weissman et al. Molecular Cloning and Chromosomal Localization of the Human T-Cell Receptor $\zeta$ Chain: Distinction from the Molecular CD3 Complex. <i>PNAS</i> 85, 9709-9713 (1988).		
FU	Wennstrom et al. The platelet-derived growth factor beta-receptor kinase insert confers specific signaling properties to a chimeric fibroblast growth factor receptor. <i>J. Biol. Chem.</i> 267, 13749-13756 (1992).		

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FV	Wittbrodt et al. The Xmrk Receptor Tyrosine Kinase is Activated in Xiphophorous Malignant Melanoma. <i>EMBO J.</i> 11, 4239-4246 (1992).		
FW	Yang et al. A Composite FKBP12-FK506 Surface That Contacts Calcineurin. <i>J. Am. Chem. Soc.</i> 115, 819-820 (1993).		
FX	Yarden et al. Growth factor receptor tyrosine kinases. <i>Ann. Rev. Biochem.</i> 57, 443-478 (1988).		
FY	Zelle et al. Systematic Degradation of Zincophorin: A Stereoselective Synthesis of the C17-C25 Fragment. <i>J. Org. Chem.</i> 51, 5032-5036 (1986).		
FZ	Zhang et al. The insulin receptor-related receptor. <i>J. Biol. Chem.</i> 267, 18320-18328 (1992).		
GA	Zydowsky et al. Active site mutants of human cyclophilin A separate peptidyl-prolyl isomerase activity from cyclosporin A binding and calcineurin inhibition. <i>Prot. Sci.</i> 1, 1092 (1992).		
GB	Zydowsky et al. Overexpression, purification, and characterization of yeast cyclophilins A and B. <i>Protein Sci.</i> 1, 961 (1992).		
EXAMINER		DATE CONSIDERED	
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